## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

**Patent Application** 

Inventors(s): John Michael Hergenrother

Case:

10-2

Pranav Kalavade

Serial No.:

Filing Date:

Examiner:

H. Jey Tsai (in the parent)

**Group Art Unit:** 

2812 (in the parent)

Title:

Ultra Thin Body Vertical Replacement Gate MOSFET

THE COMMISSIONER OF PATENTS AND TRADEMARKS WASHINGTON, DC 20231

SIR:

## INFORMATION DISCLOSURE STATEMENT

In accordance with 37 CFR 1.98(d), the enclosed Information Disclosure Statement (IDS) of the parent application SN 10/164,202 filed on June 6, 2002 is submitted for consideration in the above-identified application.

No copies of the reference(s) listed in the IDS are enclosed.

NO FEE IS REQUIRED.

In the event of any non-payment or improper payment of a required fee, the Commissioner is authorized to charge or to credit Agere Systems Inc. Deposit Account No. 501735 as required to correct the error.

Respectfully,

Michael J. Urbano

Attorney for Applicant(s)

Reg. No. 24522 610-691-7710

Date: 08/26/63

Att. IDS w/o reference(s)

FORM PTO-14 (REV. 1-84)	149	U.S. DEPARTMENT OF COMMERCE PATENT & TRADEMARK OFFICE									CASE NO. 7-1	SERIAL NO: 10/164,202						
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	AR		Ishiwara et al., Lateral solid phase epitaxy in selectively P-doped amorphous Si films, Appl. Phys. Lett., Vol 49, No. 20, p. 1365 (Nov. 1986) (Abstract only)												01.			
-	AS	Ishiwara et al., Selective Surface Doping Method of P Atoms in Lateral Solid Phase Epitaxy, Jpn. J. App											J. App	1.				
	Phys., Vol. 31, p. 1695 (June 1992)  Dan et al., Lateral solid phase epitaxy of amorphous Si films by selective surface doping method											10d of	D atas					
	AT	Appl. Phys. Lett., Vol. 53, No. 26, p. 2626 (Dec. 1988)																
	AU		Greene et al., Thin Single Crystal Silicon on Oxide by Lateral Solid Phase Epitaxy of Amorphous Silicon and Silicon Germanium, Mat. Res. Soc. Symp. Proc., Vol. 609, p. A9.31 (2000)															
	AV	Choi et al., Ultra-thin-Body SOI MOSFET for Deep-sub-tenth Micron Era, IEEE Electron Dev. Lett., Vol. 21.																
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	AW	Conf. Tech. Dig., p. 28 (1999)												earch				
	AX	Hergenrother et al, The Vertical Replacement-GateGate Length, IEDM Tech. Dig., p. 75 (1999)																
	AY	Oh et al, 50 nm Vertical Replacement-Gate (VRG) pMOSFETs, IEDM Tech. Dig., p. 65 (2000)																
	AZ	Hergenrother et al, 50 nm Vertical Replacement-Gate (VRG) nMOSFETs with ALD Dielectrics, IEDM Tech. Dig., p. 51 (2001)													ech.			
	BA	He	Hergenrother et al, The Vertical Replacement-Gate MOSFET, Proc. 2 <sup>nd</sup> European Workshop on the Ultimate Integration of Silicon (ULIS)., p. 1 (2001)															
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